



Patents

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Fred S. Cannon et al.

Appln. No.: **10/085,469**

Group Art Unit: 1724

Filed: **February 28, 2002**

Examiner: Cintins Ivars

Title: **METHOD OF HEAT TREATING
ACTIVATED CARBON TO ENHANCE
ADSORPTION OF TASTE AND ODOR
COMPOUNDS AND TOTAL ORGANIC
CARBONS FROM WATER**

Atty Docket No. 1665-1-1
Customer ID 25207

TRANSMITTAL LETTER

BOX IDS

Honorable Commissioner for Patents
Washington, D.C. 20231

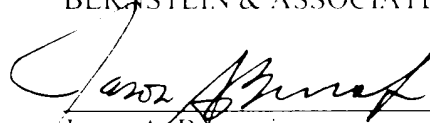
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- Form PTO/SB/08A
- Supplemental Information Disclosure Statement
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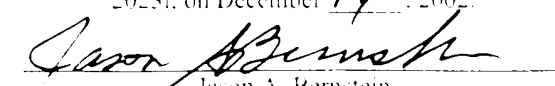
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Respectfully submitted,
BERNSTEIN & ASSOCIATES, P.C.


Jason A. Bernstein
Reg. No. 31,236

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Group Art Unit: 1724

Examiner: Cintins Ivars

Atty Docket No. 1665-1-14
Customer ID 25207

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

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The citation of information on the attached Form PTO SB 08A made pursuant to 37 CFR 1.56. A copy of each cited item is enclosed.

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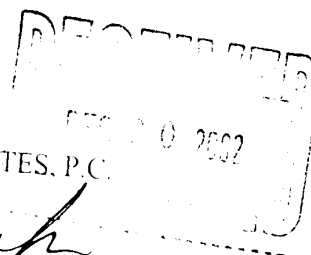
Respectfully submitted,
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/085,469		
		Filing Date	February 28, 2002		
		First Named Inventor	Fred S. Cannon et al.		
		Art Unit	1724		
		Examiner Name	Cintins Ivars		
Sheet	1	of	4	Attorney Docket Number	1665-1-1

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ²	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number, Kind Code, and Date ³			
	A	US- 5,154,750	05/15/79	Moore et al.	RECEIVED DEC 27 2002 TC 1700
	B	US- 4,150,045	04/17/79	Sinha	
	C	US- 6,064,560	05/16/00	Hirahara et al.	
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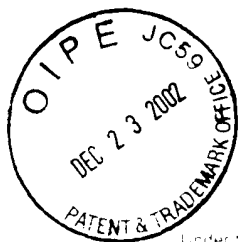
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Examiner Initials ¹	Cite No. ²	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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Substitute for form 1449B-PTO		Complete if Known	
		Application Number	10/085,469
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	February 28, 2002
		First Named Inventor	Fred S. Cannon et al.
		Group Art Unit	1724
		Examiner Name	Cintins Ivars
		Attorney Docket Number	1665-1-1
Sheet	2	of	4

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/	D	Herzing et al., "Activated Carbon Adsorption of the Odorous Compounds 2-Methylisoborneol and Geosmin," Journal AWWA, April 1977, pp. 223-228.	
/	E	Lalezary-Craig et al., "Optimizing the Removal of Geosmin and 2-Methylisoborneol by Powdered Activated Carbon," Research and Technology.	
/	F	Chen et al., "Evaluation of Granular Activated Carbons for Removal of Methylisoborneol to Below Odor Threshold Concentration in Drinking Water," Wat. Res. Vol. 31, No. 5, pp. 1155-1161, 1997, Elsevier Science Ltd.	
/	G	Ellis et al., "Removal of Geosmin and Methylisoborneol from Drinking Water by Adsorption on Ultrastable Zeolite-Y," Wat. Res., Vol. 27, No. 4, pp. 535-539, 1993, Pergamon Press Ltd.	
/	H	Terauchi et al., "Studies on a Biological Filter for Musty Odor Removal in Drinking Water Treatment Processes," Wat. Sci. Tech., Vol. 31, No. 11, pp. 229-235, 1995, IAWQ.	
/	I	Lalezary et al., "Evaluating Activated Carbons for Removing Low Concentrations of Taste- and Odor-Producing Organics," Research and Technology	
/	J	Coughlin et al., "Role of Surface Acidity in the Adsorption of Organic Pollutants on the Surface of Carbon," Environmental Science and Technology, Jan. 1958, pp. 291-297.	
/	K	Randtke et al., "Evaluating GAC Adsorptive Capacity," Journal AWWA, August 1983, pp. 406-413.	

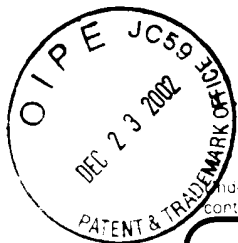
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Substitute for form 1449B/PTO		Complete if Known	
		Application Number	10/085,469
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	February 28, 2002
		First Named Inventor	Fred S. Cannon et al.
		Group Art Unit	1724
		Examiner Name	Cintins Ivars
		Attorney Docket Number	1665-1-1
Sheet	3	of	4

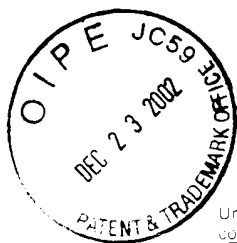
OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. 1	Include name of the author (in CAPITAL LETTERS); title of the article (when appropriate); title of the item (book, magazine, journal, serial, symposium, catalog, etc.); date, page(s), volume-issue number(s), publisher, city and/or country where published.	T-1
L		McCreary et al., "Granular Activated Carbon in Water Treatment," Journal AWWA, August 1977, pp. 437-444.	
M		Levi et al., "Offensive Tastes and Odors Occurring After Chlorine Addition in Water Treatment Processes," Wat. Sci. Tech., Vol. 20, No. 8/9, pp. 269-274, 1998, IAWPRC.	
N		Chudyk et al., "Activated Carbon Versus Resin Adsorption of 2-Methylisoborneol and Chloroform," Journal AWWA, Sept. 1979, pp. 529-538.	
O		Gillogly et al., "Kinetic and Equilibrium Studies of 14C-MIB Adsorption on PAC in Natural Water," University of Illinois at Urbana-Champaign, Dept. of Civil Engineering, pp. 627-645.	
P		Vik et al., "Pilot Scale Studies of Geosmin and 2-Methylisoborneol Removal," Wat. Sci. Tech. Vol. 20, No. 8/9, pp. 229-236, 1988, IAWPRC.	
Q		Huang et al., "Adsorption Kinetics of MIB and Geosmin," April 1996, pp. 116-128.	
R		Ando et al., "Removal of Musty-Odorless Compounds in Water and Retained in Algal Cells Through Water Purification Process," Wat. Sci. Tech., Vol. 25, No. 2, pp. 299-306, 1992, IAWPRC.	
S		McGuire et al., "Overview of Technology for Controlling Off-Flavors in Drinking Water," Wat. Sci. Tech., Vol. 20, No. 8/9, pp. 215-228, 1998 IAWPRC.	

Examiner Signature	Date Considered
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Substitute for form 1449B PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/085,469
		Filing Date	February 28, 2002
		First Named Inventor	Fred S. Cannon et al.
		Group Art Unit	1724
		Examiner Name	Cintins Ivars
Attorney Docket Number	1665-1-1		
Sheet	4	of	4

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	IT	Burlingame et al., "A Case Study of Geosmin in Philadelphia's Water."	

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